**Claims**

1. Multistage transmission for an internal combustion engine having a disconnect-type clutch, a drive shaft and a driven shaft on which engaged gearwheels are arranged to achieve different gear steps, wherein clutches (S1 to S4) that can be actuated via shift forks (6 to 12) are used to move the speed gears to generate a frictional connection with the gear shaft (2, 4), and the gear change is effected by means of a control cable and/or gearshift linkage arrangement, characterized in that the gear pairs for the even gears (G2, G4, G6) and the odd gears (G1, G3, G5, G7) are arranged side by side in the manner of a dual clutch gear set, wherein to implement an H shift pattern for actuating the clutches (S1 to S4) of the even gears (G2, G4, G6) and the odd gears (G1, G3, G5, G7), a shifter shaft each (14, 16) is provided, and the two shifter shafts can be operated via a common selector and/or gearshift control system.

2. Multistage transmission as claimed in Claim 1, characterized in that the gearshift control system has a gate element (18) connected to a control cable or a gearshift linkage and having at least one guide track (22, 24, F) and for each of the two shifter shafts (14, 16) has a lever idler system (31, 33), the one end of which is coupled to the gate element (18, 18') and the other end of which is coupled to the shifter shaft (14, 16).

3. Multistage transmission as claimed in Claim 2, characterized in that the first end of the idler system (31, 33) engages with the guide track (22, 24, F) of the gate element (18) via a guide pin (26, 28, P) and the second end of the idler system engages with a guide groove (56, 58) of a bushing (60, 62) fixed to the shifter shaft (14, 16) via a guide pin (52, 54).

4. Multistage transmission as claimed in any one of the preceding claims, characterized in that shift fingers (78 to 84) provided on the shifter shafts (14, 16) interact with shift openings (88) of shift plates (86), wherein the latter are connected, respectively, to a shift fork (6 to 12), such that a rotary motion of the shifter shaft (14, 16) is converted into a linear motion of the selected shift plate (86) or shift fork (8 to 12).

5. Multistage transmission as claimed in Claim 4, characterized in that the shift plates (86) each have two shift openings (88) located opposite each other, wherein the shift fingers (78 to 84) for a shift plate (86) are axially and radially offset 180° in relation to each other.

6. Multistage transmission as claimed in any one of the preceding claims, characterized in that the selector control has a lever element (72), which is connected to the control cable or the gearshift linkage and to which two shifter shafts (14, 16) are coupled.

7. Multistage transmission as claimed in Claim 6, characterized in that the two ends of the lever element (72) engage, respectively, with a guide groove (64, 66) of a bushing (60, 62) fixed to the shifter shaft (14, 16) via a guide pin (68, 70).

8. Multistage transmission as claimed in Claim 3 and 7, characterized in that the bushing (60, 62) for the shift and selector control system is formed as a single unit.

9. Multistage transmission as claimed in any one of the preceding claims, characterized in that a locking shaft (90, 92) each is associated with the shifter shafts (14, 16), which is

axially guided via the shifter shaft (14, 16) and has a locking structure (98, 100) for the non-selected shift forks (6, to 12).

10. Multistage transmission as claimed in Claim 9, characterized in that the locking shaft (90, 92) has locking pins (98), which engage in locking grooves (100) of shift plates (86) of non-selected shift forks (6 to 12).